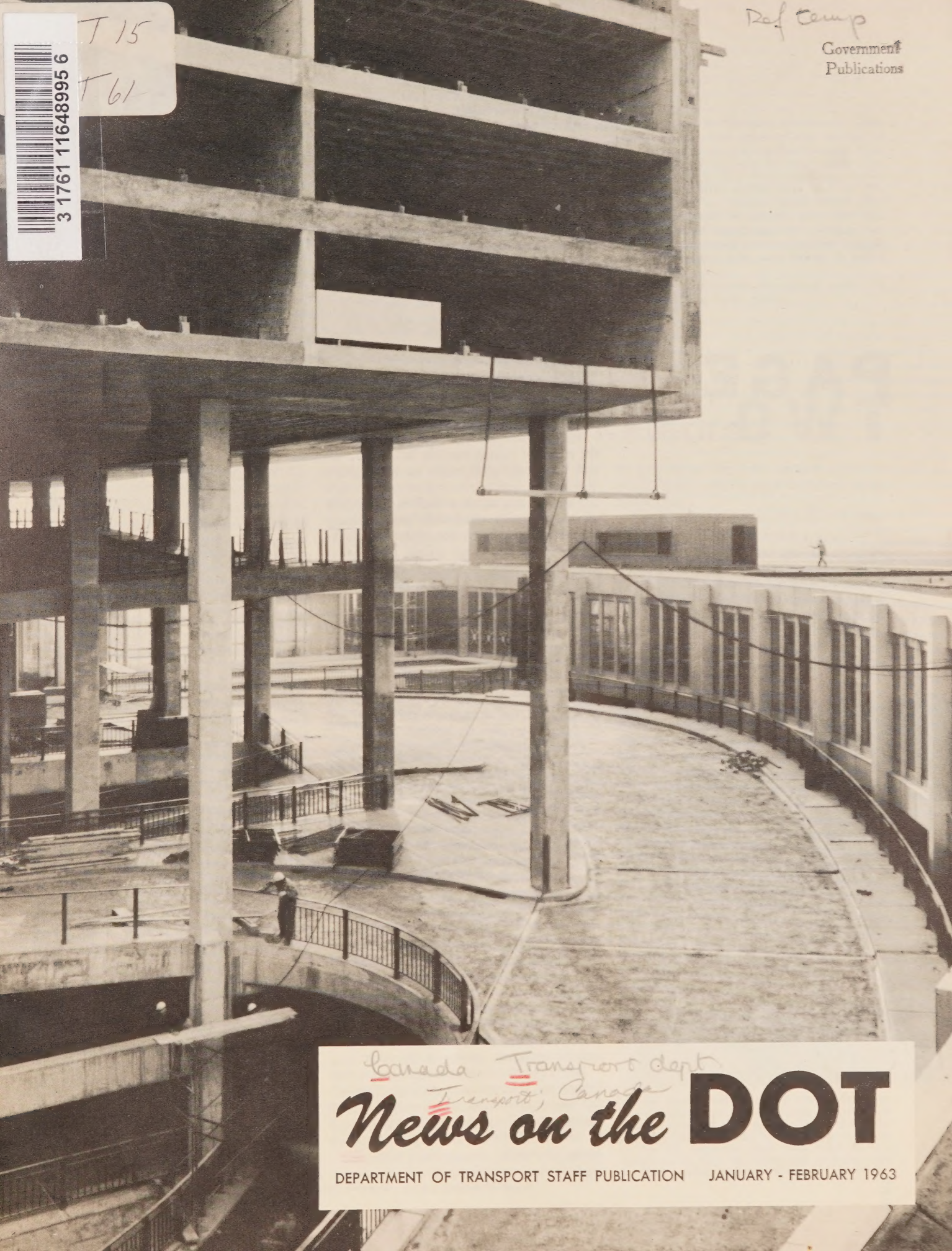


3 1761 11648995 6

T 15
T 61

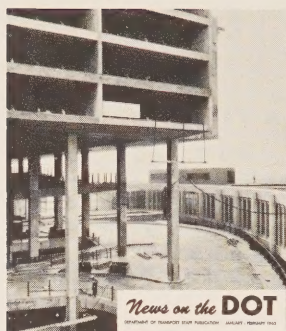
Ref Camp
Government
Publications



Canada Transport Dept
Transport, Canada
News on the DOT

DEPARTMENT OF TRANSPORT STAFF PUBLICATION JANUARY - FEBRUARY 1963

PAGE TWO



COVER STORY

As far as anybody can predict, the biggest curtain stealer in air services during 1963 will be the opening of the circular terminal building at Toronto International Airport this summer.

This recent construction photo shows the maze of ramps curving left, right, up and down in what must be a builder's nightmare.

The concave window wall is the inside of the aeroquay which will house waiting rooms and the usual concessions such as coffee shops and news stands. This aeroquay completely surrounds the parking building, upper left, which is built to hold more than 2,000 cars.

The sunlit roadway dominating the foreground of the picture is actually one flight up from ground level and provides direct access to the aeroquay's second floor.

The workman seen at centre right is walking on the aeroquay's roof and not on the runway directly behind.

Toronto International Airport (Malton) is being built to a master plan developed jointly by departmental architects and the Toronto consulting architectural firm of J. B. Parkin Associates.

Keyed to maximum convenience for passengers and efficiency of aircraft handling, its focal point will be a central administration building resting in a sunken circular plaza. Grouped around it will be up to four circular aeroquays at which aircraft will load and unload passengers and cargoes. A powerhouse and separate three-legged control tower (News On The Dot May/June '62 issue) are also part of the project.

The initial stage of the project, costing approximately \$30 million, consists of the central building, the powerhouse, the tower and the aeroquay shown on the cover.

While the aeroquay principle is not new (Montreal International Airport (Dorval) has one) the Toronto plan is unique in that passengers will be able to drive their cars to within 300 feet of the aircraft they are about to board.

Retired Lightkeeper Celebrates 100th Birthday

Very few people reach the respectable age of 100 years, but one who did in 1962 is Adam Brown, a former lightkeeper at Red Rock light on Georgian Bay.

Born at Holstein, Ontario, on December 17, 1862, Mr. Brown served as Red Rock lightkeeper from 1899 until his retirement in 1937. When he first took on the job his annual salary was all of \$450, paid in quarterly installments.

On behalf of D.O.T. employees across the country, News On the DOT wishes Mr. Brown, now a resident of Parry Sound, Ontario, a belated happy birthday and continuing good health.

CONTENTS

	PAGE
Model Aids Hydraulic Research.....	3
You and the Glassco Report.....	4
Icebreaking On The Upper Lakes.....	6
Profile Of A Story Teller.....	8
Canada's "Mr. Water Safety" Retires..	8
Gimme the Cash.....	9
DOT's Interesting.....	11
Wasp-Waisted Lighthouse New Sight On River.....	12
Inventor, Antique Car Aficionado, Concrete Sculptor and Bachelor.....	14
Foto Features.....	16
In Memoriam.....	17
Heads New Research Division They Showed How.....	18
A New Life For The <i>Agnes P.</i>	19
Marine Correspondence Course.....	19
Attends Course At Kingston.....	19
1962 CCGS Arctic Resupply Routes....	20

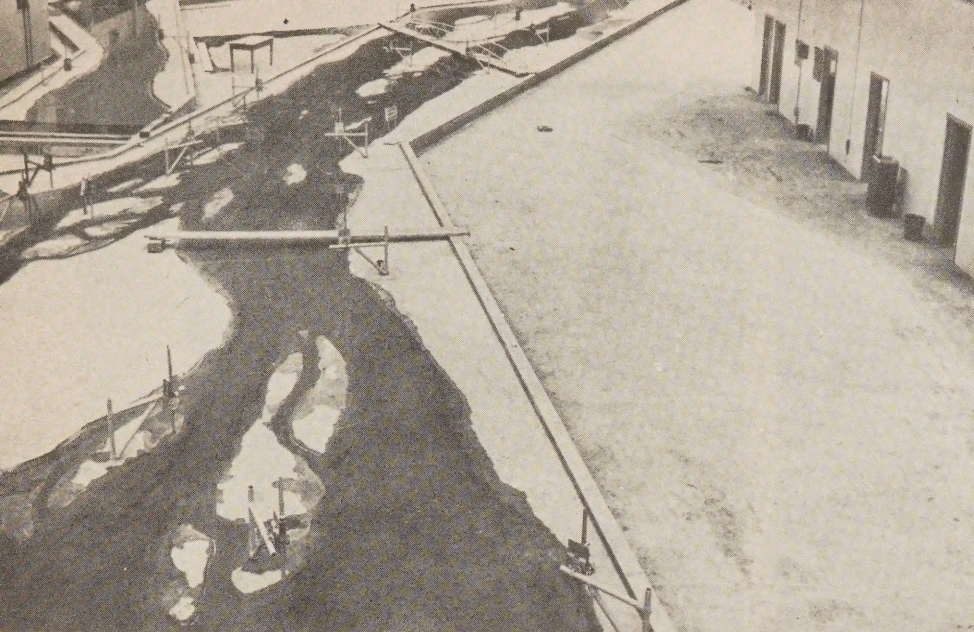
News on the DOT

Staff magazine for the
Department of Transport
Published under the authority
of the Minister,
Hon. LÉON BALCER, Q.C.
by the Information Services Division,
Ottawa.

Editor: Yvonne McWilliam

Vol. XIV No. 1

Jan.-Feb. 1963



◀ Bird's eye view of Transport Department's giant working model of St. Lawrence ship channel at Ville LaSalle, Que. Looking downstream, large island in left foreground is Ile Ste.-Therese. Long island in centre is Ile de Vercheres. Upper section of model represents stretch from Bout de l'Ile (to left of Ile Ste. Therese, where Ottawa river joins St. Lawrence) to Lanoraie near rear wall. Lower section of model, seen left of upper section, represents stretch downstream from Lanoraie to Lake St. Peter, with Sorel Islands in centre background.

Gallows-like instruments throughout model are gauges recording water levels.

Model Aids Hydraulic Research

A scale model of a 54-mile section of the St. Lawrence River has just been completed as a research aid to hydraulic engineers who face the problem of abnormally low water levels.

The model covers the stretch from Nun's Island at Montreal eastward to the Lake St. Peter section of the river and includes the Sorel Islands.

Built for the department by LaSalle Hydraulic Laboratory at Ville LaSalle, Quebec, the concrete model is housed in a building 370 feet long and 115 feet wide. It is a faithful reproduction of the river, complete with shore lines, islands, bridges, and shoals. It took five months to build and cost \$88,500.

D.O.T. engineers are now busy experimenting with it to test their proposals for improving the channel and raising the water levels.

Below average precipitation in recent years has accentuated the effects of the widening and deepening of the channels below Montreal which have been carried out over a long period of time.

As a result water levels, especially at Montreal Harbor, have at times fallen below the 35-foot advertised depth, forcing large freighters to load to less than full capacity.

The section of the river where improvements are most needed is the stretch from Montreal to Lake St. Peter. Because of the complex nature of this reach the model was built. The engineers work out the effects of their proposals by pure computation, but the model enables them to check and evaluate their findings before actually starting construction. As John Sylvester, hydraulic engineer says, "It's cheaper that way."

It provides D.O.T. engineers with the unique opportunity of seeing the entire 54

miles of river in action. The effects of rising and receding waters can be seen in a matter of minutes and river flows can be created in miniature to demonstrate the functioning of existing or planned navigation channels and marine works.

Model Testing Pays Off

It has been demonstrated, especially in connection with the Seaway, that the cost of model studies is returned many times over in actual savings in construction costs.

To build this particular model, such information as shape and depth of the river bottom and the location and size of islands and man-made structures in the river was necessary.

A lot of this was available from hydrographic and topographic surveys carried out by the Department of Mines and Technical Surveys in earlier years, but in addition D.O.T. survey crews spent almost two years taking soundings and gathering additional data on water levels, flows and velocities.

Scales Carefully Chosen

Horizontally, the model is 600 times smaller than the natural river, but vertically it is only 150 times smaller.

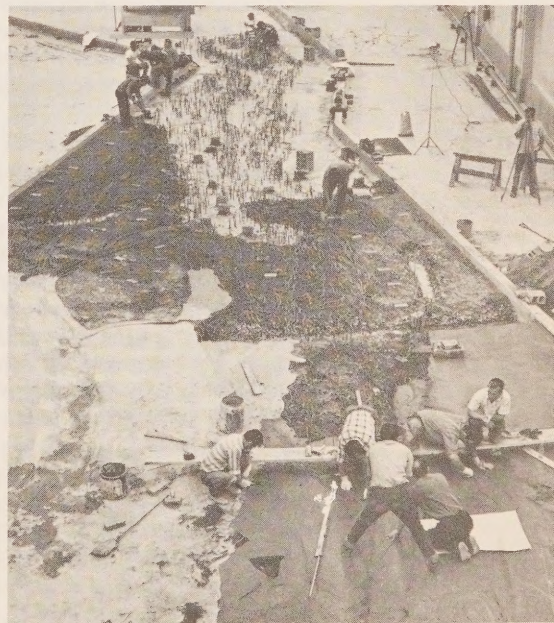
On the average, the flow of the river past Montreal is nearly 2,000,000 gallons per second; in the model this amounts to about two gallons per second, or approximately one millionth of the river flow. Velocities in the model are about 12 times smaller than actual river velocities, and are measured by a tiny meter in a manner similar to the measurements taken in the river.

These scales were carefully chosen having in mind the type of studies to be made, the space available and the time and cost involved.

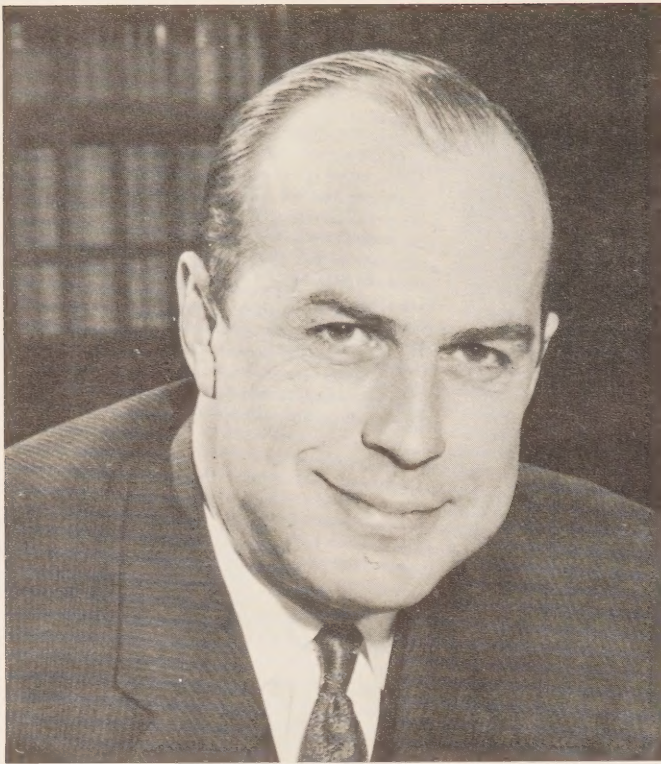
So-called point gauges in the model are so accurate that they measure to within half

an inch what the water level in the river would be at a certain point under any given conditions.

The model was adjusted so that all water levels and flow measurements corresponded to those in nature. This process is called "verification" and is carried out by applying "bed roughness" in the form of crushed stone. This is distributed over the bed of the model until the water surface at all gauges agrees with that in the river for a corresponding flow. Everything was then "ship shape" for the long months of testing ahead.



At the Models Laboratory at Ville LaSalle wet cement (dark part of foreground) is molded by hand to simulate river bottom. The model faithfully reproduces essential hydraulic characteristics of the St. Lawrence river from Nun's Island, Montreal, to Lake St. Peter and is being used to study control of river levels.



The honorable Leon Balcer, Minister



J. R. Baldwin, Deputy Minister

YOU and the Glassco Report

a joint message from the Minister and the Deputy Minister

The report of the Royal Commission on Government Organization (The Glassco Commission) is of current interest to all civil servants. At the time of writing only the first three of the five volumes have appeared, but by the time you read this, the remaining volumes will probably be available.

It is desirable to have periodic fresh, independent views of our operations, since long-accepted practices and procedures easily become like old and familiar articles of clothing; something which we take for granted and, because of a sense of familiarity, never throw away.

The philosophy of efficient business management which has been spelled out in the Commission's report should, to the greatest extent possible, be applied carefully and continually to the operation of government departments. This has always been our objective in the Department of Transport. At the same time, we must recognize that the business of government is somewhat different from a private corporation. While the same desire for efficient management should apply, some different elements have to be taken into consideration by government departments, both in administration and advice on policy-making functions. There are factors which may limit a department from making the type of decision which a private business corporation would make in equivalent circumstances. Cabinet can be compared to the Board of Directors of a corporation with the Canadian public representing the shareholders and the government departments and agencies representing the branches of the corporation, but this is not a complete analogy.

In our discussions with some of you we have sensed the feeling that the reports of the Commission, or perhaps press interpretation of these reports, have suggested that every criticism which the Commission has made is equally applicable to every department; and that the new procedures which the Commission have proposed are in every case right and need to be adopted by all departments. Actually in our own review of the report, we have found that a great many of the procedures which the Commission suggested are already in effect in Transport.

We are reviewing all the relevant recommendations to ensure that we do the best thing from the point of view of government administration. There are useful and helpful criticisms in the report which we are studying and which will undoubtedly lead to some changes in management procedures. Indeed, a most significant item is the fact that we may be encouraged to proceed even more rapidly than we had previously contemplated with the development of techniques such as operations analysis, management services, and budget accounting, all of which we already had.

The Commission has also recommended a number of changes in organization and transfers of duties between departments. If implemented, these could lead to transfer of some functions to other departments; transfer of functions from other departments to Transport; and, in addition, assumption of new functions in Transport. These points will have to be studied very carefully at ministerial level because of their far-reaching nature.

Some of you, who could be involved if these recommendations were implemented, may wonder what the future holds. In these cases we want to reassure employees. The report itself represents a program which could only be implemented over a period of years rather than overnight and we understand from Commission staff that indeed this is their view. Meanwhile, we need not necessarily assume that all recommendations will be put into effect. We should continue to carry on our present jobs as efficiently, economically and effectively as possible.

• • • • •

VOUS et le Rapport Glassco

message conjoint du Ministre et du Sous-ministre

Le rapport de la Commission royale d'enquête sur l'organisation du gouvernement (Commission Glassco) présente un intérêt particulier pour tous les fonctionnaires. Au moment où j'écris ces lignes, seuls les trois premiers tomes du rapport qui en comporte cinq ont été publiés, mais les deux autres auront probablement paru lorsque vous me lirez.

Il est souhaitable que notre activité soit examinée périodiquement par des observateurs impartiaux, car des méthodes adoptées depuis longtemps deviennent facilement comme de vieux vêtements qu'on porte depuis nombre d'années, comme quelque chose qu'on prend pour acquis et qu'on ne se décide pas à mettre au rancart, à cause des souvenirs qu'ils représentent pour nous.

Les principes d'une gestion administrative efficace qui ont été exposés dans le rapport de la Commission devraient, dans la plus grande mesure possible, être appliqués constamment dans les ministères de l'État. C'est ce à quoi nous avons toujours visé au ministère des Transports. Par ailleurs, nous devons reconnaître que les affaires de l'État diffèrent quelque peu de celles de l'entreprise privée. Tout en visant à la gestion la plus efficace, les ministères de l'État doivent tenir compte de certains éléments différents, tant dans l'administration que dans l'adoption des lignes de conduite. Certains facteurs peuvent empêcher un ministère de prendre une décision du genre de celles que prendrait une entreprise commerciale privée dans les mêmes circonstances. On peut comparer le Cabinet au conseil d'administration d'une entreprise dont les citoyens canadiens seraient les actionnaires et les ministères et organismes gouvernementaux seraient les succursales, mais cette comparaison est boiteuse.

Au cours d'entretiens que j'ai eus avec certains d'entre vous, j'ai constaté qu'on pense que les rapports de la Commission, ou peut-être l'interprétation qu'en ont donné certains journaux, laissent entendre que chaque critique portée par la Commission vise tous les ministères sans distinction, et que les nouvelles méthodes proposées par la Commission se justifient dans tous les cas et doivent être adoptées par tous les ministères. Pour notre part, nous avons constaté qu'un grand nombre des méthodes proposées étaient déjà appliquées au ministère des Transports.

Nous sommes à étudier toutes les recommandations pertinentes qui nous permettront d'atteindre au plus haut degré d'efficacité dans l'administration gouvernementale. Le rapport renferme des critiques bien fondées qui nous amèneront sans doute à modifier certaines modalités de gestion. C'est ainsi que nous ferons probablement avancer plus rapidement que nous l'envisagions la mise au point de certaines méthodes, comme l'analyse des tâches, les services de gestion et la comptabilité budgétaire, qui existent déjà au sein du ministère.

La Commission recommande également que des modifications soient apportées à l'organisation des tâches, et qu'il y ait transfert de certaines de ces dernières d'un ministère à l'autre. L'application de ces recommandations pourrait conduire à trois choses: confier à d'autres ministères certaines tâches que nous accomplissons; confier à notre ministère certaines tâches accomplies par d'autres ministères; établir de nouvelles tâches au sein de notre ministère. Ces questions devront faire l'objet d'une étude attentive à l'échelon ministériel à cause des répercussions qu'elles auront pour l'avenir.

Ceux d'entre vous qui pourraient être touchés par ces recommandations peuvent se demander ce que l'avenir leur réserve. Je désire les rassurer. Le rapport énonce un programme dont la réalisation exigera plusieurs années; c'est du moins ce que je crois être l'avis des membres de la Commission. Mais il ne faut pas nécessairement supposer qu'il sera donné suite à toutes les recommandations. Continuons à accomplir de la manière la plus efficace et la plus rentable possible les tâches qui nous sont dévolues.

With the opening of the Seaway in 1958 changes in the pattern of ship movements on the Upper Lakes were inevitable, particularly in the spring and autumn.

The department had the answers to the new problems in the form of the CCGS *Alexander Henry*, designed especially for service in the Upper Lakes. She was commissioned shortly after the Seaway's opening.

In the days before the Seaway and a Canadian icebreaker were realities the only icebreaking on the Upper Lakes was done by the tug *James Whalen* at the Lakehead, and the tug *Bayport* at Midland on the south end of Georgian Bay.

The *Whalen* was under contract to the department to break ice in the Lakehead harbor and to place the lightkeepers at the west end of Lake Superior. The *Bayport*, owned and operated by Canada Steamship Lines, was charged with the task of moving ships around at the various elevators to unload winter cargoes. Any icebreaking on the main channels of the Upper Lakes was done by the U.S. Coast Guard. The agency vessels, the *St. Heliers* and the *C. P. Edwards*, were thin-skinned and underpow-

ered. They were, of necessity, inactive for some time after navigation commenced in the spring and in the autumn before more than six inches of ice had formed in their home ports.

On this scene the *Whalen* loomed with importance at the Lakehead, the second largest harbor in the country. She was part of the established scheme of things; where other communities looked for the first robin as a harbinger of spring, the smoke of the *Whalen* breaking ice in Thunder Bay was the sign relied on by residents of Fort William and Port Arthur.

She was an unusual vessel—one of those freaks from the drawing board which, like the famous Maritime schooner *Bluenose*, was copied several times with the disappointing result that the new vessels never performed as well as the original. The *Whalen* was only 108 feet long, but she could break ice in an unbelievable manner. And there was plenty of ice to break; ordinarily the ice at the Lakehead forms 30 inches thick and extends out into the lake for a distance of 10 to 25 miles. The *Whalen* began working each winter in February. She was usually still fighting the ice in mid-April.

There is always a formidable ice barrier in Thunder Bay at the northwest end of the main course and in the Lakehead harbor, but there are other sections which usually provide more difficulty. It is axiomatic with us that our main trouble each spring, like lightning, never strikes in the same place twice.

In the spring of 1957 the chief obstruction was in Whitefish Bay at the eastern end of Lake Superior. In 1958 the jam occurred in lower Lake Huron and, although ships were sailing freely on the Upper Lakes, they could not move in the extreme south until the last week of April. The following year the chief hold-up occurred at Port Colborne where the Welland Canal opens into Lake Erie. And in 1960 the big barrier was in Georgian Bay, at the entrance to Midland harbor. In 1961 the bouncing ball of adversity for icebreakers hit the Lakehead. That year, although the channels were easily opened in the first place, adverse winds held the ice fields against the harbor entrances for three weeks. When the wind shifted to the west it all disappeared in a day, helped merrily on its way to the open lake by the *Alexander Henry*. It is something of a paradox that each spring the

Icebreaking on the Upper Lakes

by F. K. McKean

District Marine Agent,
Parry Sound, Ontario.



The CCGS *Alexander Henry* in her winter berth at Midland Harbor. The Christmas tree atop her superstructure is an annual addition to all CCG vessels.

thickest ice is found at the southern, not the northern, end of the Upper Lakes channel.

To explain all this would require a detailed study of geography, climate, and physics. Suffice it to say the salient facts are: the Upper Lakes course runs more north and south than east and west; fresh water ice is crystalline in structure, not amorphous like salt water ice and, although it has great tensile strength when cold, it deteriorates quickly into "needles" with a bit of sunshine and warm weather.

The amount of ice in any area is governed by the depth of water and the degree to which the section is landlocked, not by that latitude of the area. An otherwise favorable section may be bad for ice simply because it is exposed to the prevailing winds and becomes jammed with fields from the open lake. A strong current quickly deteriorates ice in the spring, even in the far northern reaches.

Although there is no need for winter-long navigation on the Upper Lakes, it is important that ship movements begin as early as possible in the spring and continue until mid-December.

With an icebreaker operating over this route it is possible for commercial vessels to begin two weeks before the Seaway opens, and continue two weeks after it closes. Thus, the fleet of bulk carriers which is occupied all summer long on the Seaway can be used, spring and autumn, to handle the more localized needs of the Upper Lakes traffic.

Most of the bulk carriers like to winter in the Bay ports—Goderich, Owen Sound, Collingwood, Midland and Port McNicoll—so they can make an early start in the spring for the Lakehead and a cargo of grain. When the Seaway closes they make another two or three trips between the Bay ports and the Lakehead, relieving the pressure of the western harvest on the grain elevators, and ending with a remunerative winter storage cargo in their holds. An icebreaker must be in attendance all winter among these ships, so they may be moved around at the elevators for unloading.

The *Alexander Henry* remained at the Lakehead during the first winter of her service and her potentialities were largely untried. The ships coming down in the autumn had to buck the ice by themselves, there was no icebreaker to move them at the elevators during the winter, and in the



The Henry breaks ice in Thunder Bay in Arctic-like conditions.

spring they could not break loose from Midland Bay to begin the first trip up the Lakes. In the spring our new ship proved her capabilities at the Lakehead very well. She broke out the channels and placed the lightkeepers in a fraction of the time these chores could have been done by the old *Whalen*. But there still were no ships coming over the horizon toward the harbor; they were icebound at Port Colborne, Owen Sound, Collingwood and Midland. We finally resolved the difficulty by despatching her to the south. With her arrival on the scene shipping began to move so fast that on her way back up the lakes, the *Henry* met downbound vessels loaded with grain and iron ore on their way to market.

Last winter the *Alexander Henry* assisted with the unloading of winter cargoes in Midland and Collingwood, then departed up the lakes on March 26. She arrived at the Lakehead on April 6, after breaking through extensive fields of ice in Georgian Bay, the St. Mary's River, Whitefish Bay and Thunder Bay, and

placing the principal lightkeepers along the way. Ice at the Lakehead extended out about 25 miles, much farther than usual, and yet the *Henry* broke through in 17 hours, a task which would have taken that old workhorse the *Whalen* six weeks.

One of the great bonuses arising from the use of this vessel is that ship movements may now be scheduled. In former years navigation might open at the Lakehead any time between March and May. Now we are in a position to advise, with reasonable accuracy, the shipping companies when we will be departing upbound each year, and they know they can follow soon after. In autumn they can despatch their ships for that last load before the canals close with every confidence that it will be delivered.

The *Alexander Henry* and the contribution she is making to shipping on the Lakes is something which every member of the Department of Transport can take pride in just as we at Parry Sound do.

Profile of a Story Teller

The D.O.T. district marine agent at Parry Sound—an engineer by profession—was the 1962 winner of the annual Ontario I.O.D.E. short story award.

Fleetwood Kingsley McKean, more commonly known as Dick, won the \$200 award for his story "Dog Wolf of Otter Head". The story is based on the many yarns told him by Big Gus the Trapper when the two got together in Dick's cabin aboard the old *St. Helier's*, a former Parry Sound depot ship.

The first to admit that it is most unusual for a mining engineer to win a literary award, Dick says that the probable reason for his success is that English was the only subject in which he led his class at university.

Although he was born in Collingwood, Ontario, only a few miles from Parry Sound, Dick McKean did not spend all his 50-odd years in that pleasant region of western Ontario.

His father ran a lumber mill there, but while Dick was still in knickers decided to pursue his fortune south of the border in Maine. Dick graduated from high school at Bangor, Maine, after spending a few years in Californian schools while his father "lumbered" on the West Coast.

When it came time to go to university, young "Fleet", as he was fondly called by his father, chose to return to Canada and Kingston's Queen's University where he enrolled in the engineering faculty. It was there that the future prizewinning story teller first put pen to paper as the engineering reporter for the school paper.

He graduated in 1940 and left for the copper mines of Chile. Three years later he returned to Canada and employment with the Wartime Metals Corporation in the chrome-producing region of Black Lake, Quebec. Another year and another job—this time as field engineer with the Department of Mines in Ottawa.

It was in 1944 that he met and married Eleanor Stitt of Stittsville (some 15 miles from Ottawa). The couple now have two sons—17 year-old Jimmy and 8-year-old Ricky.

In 1947 Dick decided to try his hand as a member of a New York City consulting engineering firm, but the year hadn't passed when he chanced upon a Canadian Government advertisement for the position of district engineer at Parry Sound. The lure of returning to the area of his birth was strong. He got the job and although he didn't know it then, with that move left his



wandering days behind. In 1951 he was promoted to district marine agent.

Dick has dabbled in article and story writing for many years, but the I.O.D.E. contest marked the first time he submitted any of his work for adjudication. It turned out to be a very profitable "first".

With all his globe trotting and job-hopping experience behind him, he has a wealth of material just waiting to be committed to paper. We can expect to see the byline "F. K. McKean" on many articles and stories in the future—in fact, by turning to page 6 of this issue you will find his first contribution to News On The DOT!

Canada's "Mr. Water Safety" Retires



On his last day at the office, friends and colleagues gathered to honor Mr. Hamilton. Left to right: Director of Marine Regulations Alan Cumyn, Mrs. Hamilton, Mr. Hamilton and Captain F. S. Slocombe, chief, nautical and pilotage division.

John E. V. C. Hamilton, Canada's first official "small boat operations officer" and known from St. John's, Newfoundland to Victoria, B.C. as "Mr. Safety Afloat" has retired.

Since March, 1957, when he was given the job of promoting water safety across Canada and of making the public aware of the laws that govern our waterways, he has become one of the country's best known

figures in the world of small boat operations. He has addressed boating clubs, outdoor groups and safety organizations by the score. He knows whereof he speaks, for he is a dyed-in-the-wool yachtsman himself and can handle a sailing craft with the best of them.

John Hamilton played an important part in the meetings arranged by the Board of Steamship Inspection with representatives of provincial governments, yachting organizations, manufacturers of boats and boat equipment, and other interested groups to draw up some of the safety regulations that are now in effect on Canadian lakes and rivers.

Mr. Hamilton is a veteran of both world wars and saw action on the Indian Northwest Frontier. He was born in India and served 14 years with the three armed forces of Canada, as well as many years with the British Imperial forces. After service in the RCAF in World War II, he served at both Naval and Army headquarters in Ottawa before joining the Department of Transport.

Mr. Hamilton is now holidaying in Britain and upon his return he and Mrs. Hamilton will reside at Victoria, B.C.

Gimme the Cash

GIMME THE 60 CENTS
AN HOUR AN YOU KEEP
THE BENEFITS



Once there was a fellow named John Bright. John worked for a very progressive insurance company. One day John got a pamphlet from the front office about fringe benefits. According to the pamphlet, the company thought so much of John that it was giving him fringe benefits costing 60 cents an hour. As John was suffering from a financial virus known as the "shorts," this news gave him a brilliant idea. He rushed down to the personnel office.

"Look," he said to the personnel director, "you like to see me happy, huh?"

"The happier you are, John, the happier we are," the personnel director beamed.

"Okay," John said. "You see this pamphlet? Well, according to it, the company is giving me fringe benefits that cost 60 cents an hour. If you want to make me really happy, let's convert that to cash. You give me the 60 cents an hour, and you keep the benefits."

The director almost wept. "But John," he whimpered, "you won't be happy without those benefits."

"But for 60 cents an hour extra, I can enjoy being miserable. That'll come to \$96 extra a month!"

"But John, fringe benefits are worth a lot more than the money involved. They make this a nicer place to work. They give you peace of mind!"

"With \$96 extra," John leered, "I'll have peace of mind. So will my creditors."

"But John, you'll lose money. You don't realize how many benefits you're getting."

"And you don't realize how many creditors I can do without."

"John, do you really want it this way?"

"Look," John said, "when you talk benefits, I don't get the message. When you talk money, though—I read loud and clear. Gimme the cash and let the benefits go."

So John went home that evening a very happy man.

"Give that chuck roast to the dog," he told his wife. "We're eating steak. I got a \$100 a month raise today."

His wife was really impressed—until she heard how he had done it.

"You think that was smart?" she said.

"Certainly it was smart! What benefits can they give me that will be worth \$96 a month? You sound like a personnel director."

So the next morning, with a light heart and a head to match, John got in his car and headed for work. Everything went fine until he turned into the parking lot. There blocking his way was the personnel director.

"John, my boy," he said, "I'm sorry, but you will have to park some place else. This free parking lot is one of those benefits. It costs us just about \$3,500 a year to maintain it for you."

John was astounded. "A parking lot is a benefit?"

"If you don't think so, try parking that thing some place else."

(continued on next page)



So John parked in another lot, paid his 35 cents and came back to the office—using up a nickel's worth of shoe leather en route. At lunch time, he headed for the employee restaurant, but halfway there he was stopped by his friend the personnel director, who gave him two more nasty shocks. He told John that he wouldn't be on salary while he was eating lunch because lunch pay was another benefit, having cost the company over \$140,000 the year before.

Then he told John that he wouldn't be able to eat in the restaurant because that was another benefit. The restaurant served meals at just above cost, and the company had spent \$46,000 the year before subsidizing it.

"Forget it!" John said. "I can eat out just as cheap."

"Sure you can!" the director said. "Try Greasy Jack's!"



John did. "How much are your ham sandwiches?" he asked. "Fifty cents," the counterman replied. "Fifty cents," John snorted. "I can get a ham sandwich back at the company for 20 cents." "Well, why don't you just go back and get it?" "Because I'm too smart to eat with those dummies," John said. "It'll cost me 30 cents more a day to eat here, but I'll still be making money."

Being weak of mind and strong of stomach, John finally got through lunch and headed back to the office. There was a note to call his wife.

"John," said his wife when he telephoned her. "Junior stuck a pea up his nose and it has worked its way up into his head. He's in the hospital." "In the hospital!" John gasped.

"Well, he's just like you," his wife said. "He's got a brain the size of a pea, and the doctor says they've got to be real careful that they don't make a mistake and remove the brain instead of the pea. It's going to cost us \$18 a day."

"Eighteen dollars a day!" John gasped again.

"Yes, he's got to have a private room. That pea rattling around his head disturbs



everybody. He sounds like the gourd section of Xavier Cugat's band."

"Well, thank heaven I've got hospitalization!" John wheezed.

"But have you?"

With that, John raced down to the personnel director's office.

"My boy's in the hospital with a pea in his head. You haven't cut off my hospitalization, have you?"

"I had to, John," the personnel director sighed. "It's another benefit. The company spent \$90,000 on it last year. You put up one-third, but the company puts up two-thirds. Here's your one-third refund."

John stared down at the refund. "But I couldn't keep a dog at the vet's for this. How much will it cost me to get as much hospitalization as I had?"

"About \$75," the director said. "You see, the company gets it wholesale. You have to buy it retail."

"I ought to be shot!" John said.

"You can't afford it!" the director said. "We have cut off your life insurance. That's

another benefit. It cost the company \$27,000 last year. Here's the refund for what you put into it."

John looked at the refund and sighed. "How much will it cost me to get as much insurance as I had?"

"About \$150 more than you've been paying. The company gets that wholesale, too."

John looked as if he was going to cry. "I need a good long rest!" he said.

"You can't afford that either!" the director said. "Vacations with pay are another benefit. They cost the company \$365,000 last year. You will be losing \$20 a day on vacation."

"I think I'll just retire!" John whimpered.

"You can't afford that, either. Your pension has been cut off. That's another benefit. The company spent \$529,000 on pensions last year. To get an annuity that would match your pension, it would cost you a lot of money."

"Well, I know what I can do!" John said grimly. "I can punch you right in the mouth. You let me think that those benefits amounted to just \$96 a month. You didn't tell me it would cost a small fortune to duplicate them."

With that, John hauled off and took a swing at the director. The director ducked, and John's fist went through a window.

"Well, don't just stand there," John snarled, staring down at his bleeding knuckles. "Get me some first aid."

The director sighed. "That's a benefit, too, John. The company spent \$33,573 on first aid and safety last year."

"Well, at least you can sympathize with me," John whined.

"That's a benefit, too, John. The company spent \$10,247 on morale expense last year."

"Well, can I make a suggestion?"

"Yes, but you won't get paid for it. That's another benefit. The company paid \$5,858 in suggestion awards last year."

"But all I want to suggest," John said, "is this: take back your lousy money and give be back my benefits."

"Gladly," the director beamed. "We know you're one man who'll really appreciate them!"

Courtesy of the National Association of Tobacco Distributors. Artist: Mrs. Mary Jane Muir, The Pelican, The Canada Life Assurance Company.

DOT's Interesting

FORT SMITH, N.W.T.—In conjunction with Fire Prevention Week in Canada, local airport officials sponsored an essay contest for children of airport employees to stimulate interest in fire prevention.

Cash prizes were offered for the best two entries and, according to Airport Manager A. F. Bevington, the results were rewarding. The local Northern Affairs fire marshal, who judged the essays, commented that all the entries were of high calibre and it was difficult to decide which were the best.

First prize went to Susan Bevington, a grade seven student, for this entry:

FIRE PREVENTION IN MY HOME

I am a Fire Hazard . . . , I am found lurking in the many corners of your house; for that matter, in everybody's house. I kill hundreds of people each year.

I am found in dusty places where there are old papers and oil rags, so remember to throw them away. You will find me in matches, which children sometimes play with, so keep them in metal containers up high on a shelf.

In electrical appliances such as stove burners, hotplates, electric heaters and cords of any sort I am found. Turn burners, electric heaters and hotplates off after they have been used and make sure cords are not frayed. I especially love to lurk about cans of gasoline, oil or paint, and am delighted when a careless individual smokes while working with gasoline.

At Christmas time I conceal myself in the tree lights, waiting for some foolish person to leave them on all night.

But, I, too, have enemies. The properly working fire extinguisher, a connected fire hose and mainly, an alert housewife and household, who know how to use them.

If you use my advice, I won't break out and destroy you or even your home.

Byron O'Donnell, a grade eight student, was the second prize winner. His submission follows:

FIRE PREVENTION IN MY HOME

Many people in the world today do not look upon Fire Prevention as an important essential in their life. They think that with so many new methods in extinguishing fires that any fire which starts will be instantly put out. So they just leave matters be, and they are usually the ones that end up homeless.

There are many ways in which you may help to prevent fires in your home Look around and notice all the things that are constant fire hazards. Any rubbish piled in a corner or against a furnace should either be thrown out or moved to a safer place. Oil rags pose a serious menace to your family, so they should be thrown out or burned Clean up those

storage rooms and cluttered up basements and know where your fire extinguishers are—someday you may need them—be sure that you know where the nearest Fire Alarm is.

Don't allow yourself to become one of these people who shun fire prevention . . . Just remember that "An ounce of prevention is worth a pound of cure."

MONTREAL—Harry Sanderson, foreman carpenter at Montreal International Airport, retired on November 12. He was feted by his fellow employees and received a hand-tooled wallet, complete with "spending money". Mr. Sanderson saw 20 years of service prior to his retirement.

FROBISHER—Seaman James Nash of Branch, Newfoundland, owes his life to a D.O.T.-designed vest.

Last October Seaman Nash was handling cargo between a shallow-draft Coast Guard landing craft and other vessels in Frobisher harbour when he lost his balance and toppled overboard. Fortunately, he was wearing a buoyant "crew vest" lined with

flotation material. It kept him afloat in the icy water until his fellow crew members were able to haul him to safety.

The vest, designed by Captain W. Harrison, marine superintendent, is a "must" for all Canadian Coast Guard personnel working in small boats or precarious places where a tumble into the water is possible.

Designed in sleeveless style so as not to impede a man unduly in his work, the vest provides a good measure of safety and also serves as a warm garment. However, it is not regarded as a replacement for a life jacket in circumstances under which life jackets are used.

Jim Nash is very happy that the Canadian Coast Guard instructions state that the vests "are to be worn without exception by everybody working at tasks where they are exposed to the risk of falling in the water." The water temperature in Frobisher Bay, even at the height of the Arctic summer, is around the freezing point of fresh water. In October, when he took his dip, it is so cold a man is almost immediately stricken helpless.



SAINT JOHN, N.B.—The bridge of the CCGS *Thomas Carleton* was the scene of three presentations of the United Fund's "Outstanding Citizenship Plaque."

Receiving the separate awards were the deck and engine departments of the vessel and the office staff of the Saint John marine agency. In making the awards George W. Green, United Fund chapter plan division chairman, noted that these

employees supported the Fund with regular staff collections instead of the usual pay deduction method.

Left to right: Louis E. Murphy, personnel officer; Mr. Green, Captain Hubert Caines, acting master of the *Carleton*; F. A. McKinnon, district marine agent, Arthur King, quartermaster and Lancelot Kitchen, chief engineer.

Wasp-Waisted Lighthouse New Sight on River



Site of the sinking of the Prince Shoal lighthouse caisson was a busy spot as the tugs jockeyed the giant structure into exact position.

Early last August the department "sunk" its newest lighthouse—it was careful to sink only part of it, though!

Sunk in the 38 feet of water was the hourglass-shaped, 5,000-ton-base of the more than \$1,000,000 lighthouse. When completed this summer it will take over from the Prince Shoal lightship the job of guiding vessels safely past the treacherous shoal at the confluence of the Saguenay and St. Lawrence rivers.

Built at Champlain Drydock, Levis, Quebec, the lighthouse caisson—or "yo-yo" as it was affectionately called by those on the job—was towed across the river to Quebec City in June for the erection of a temporary wharf structure on its side and for a crane and other equipment to be mounted on top for construction operations. At 5:30 a.m. August 6, four chartered tugs undertook to tow it the 105 miles down river to its final anchoring place. After 50 hours of battling fog and storm, they arrived.

Changing tides and currents made placing the caisson in position difficult, but engineers and crew members of the small fleet of vessels—the CCGS vessels *Ernest Lapointe*, *Chesterfield* and *Beauport* and the Marine Industries Ltd. tugs—co-

ordinated their efforts. They spent several suspenseful hours waiting for suitable tide conditions. Then the caisson's valves were opened and it sank slowly down to a specially built foundation on the river's bottom.

Essentially a huge steel tub, the water-filled caisson was loaded with 8,000 tons of crushed rock which forced most of the water out. This phase of the operations took about two weeks. Next came the pumping in of 50,000 cubic feet of cement and sand grout and later, 500 cubic yards of concrete were added to make the base so heavy that current and ice will be powerless against it.

After steel sheet piling had been driven into the river bottom around the base and concrete had been poured to the floor level of the lighthouse basement, construction was suspended for the winter months.

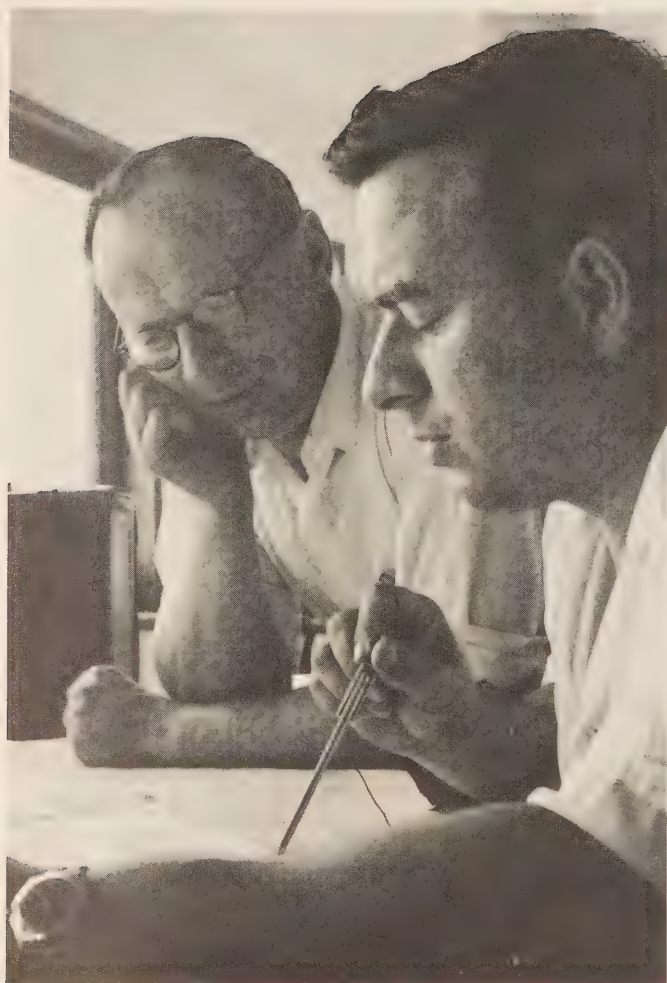
Similar in structure to the seven-year-old White Island lighthouse 10 miles upstream, the Prince Shoal lighthouse is no beauty queen. It's vital statistics are 203-78½-283—feet, that is, in circumference.

The top of the hourglass, 65 feet in diameter, will be stocked with fuel and water tanks. The superstructure which is being built on site, houses an engine room

and living quarters for two lightkeepers. It is 12 feet high with a 39-foot tower, 12 feet in diameter, built on one side of it. The remaining area is left open for helicopters to land, making Prince Shoal Canada's first lighthouse to sport its own helicopter deck.

Much credit goes to all the D.O.T. men who worked so hard—some with pencil and paper calculating every measurement and angle to the nth degree, and others who expended much physical effort to ensure that everything went according to these calculations. Among those closely concerned with this million dollar venture were Director of Marine Works W. J. Manning who, as a former Quebec district marine agent, knows firsthand how important the presence of this lighthouse will be to St. Lawrence River navigation; A. K. Laing, chief aids to navigation, whose division was responsible for the entire project; and Joe Danys, superintendent of construction, aids to navigation, the man who designed the lighthouse and worked with contractors throughout each stage of its building and "sinking".

Since the lighthouse will be part of the Quebec marine agency operations, many of its people played major roles in the under-



Joe Danys (left), superintendent of construction, aids to navigation, and Paul Vallée, superintendent of lights for the Quebec agency, make some final calculations from their vantage point in the wheelhouse of the CCGS Ernest Lapointe.



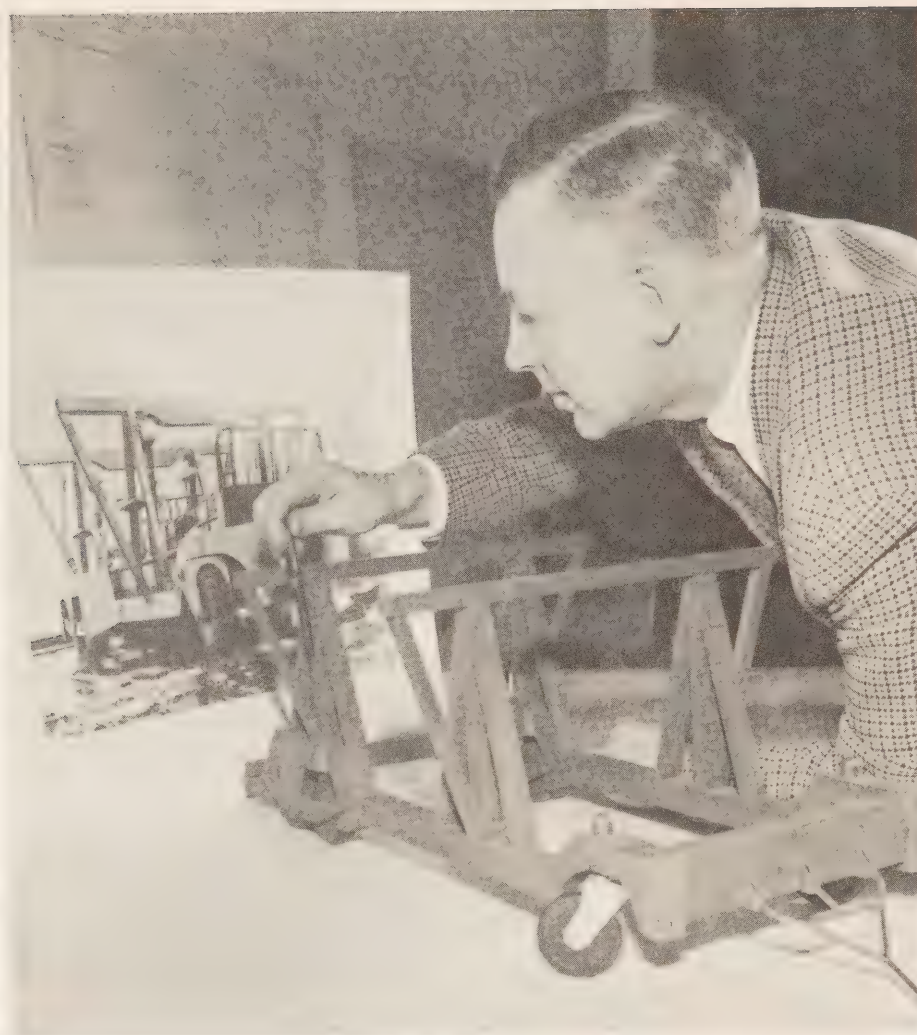
Captain R. Marchand temporarily vacated his role as master of the Lapointe to take over the wheel of the tug Louise Simard and lead the flotilla down river.

taking. The district marine agent, Captain George Gaudreau, assisted in the organizational details; the district engineer, Jean Paul Godin, was one of the busiest men of all since it fell to him to coordinate the activities of all the men and vessels for the "sinking" operations. And, then there was that bon vivant Canadian Coast Guard captain, Captain R. Marchand, who temporarily vacated his berth as master of the CCGS *Ernest Lapointe* to take over the wheel of the tug *Louise Simard* and lead the whole flotilla down the St. Lawrence—even for a few hours in zero visibility fog. It required a man of great experience to see that the caisson was towed to the Prince Shoal site without damage—and Captain Marchand, with 30 years of departmental service, was the man for the job. He was dubbed "Captain of the Yo-Yo!".

These men, and the many others it is impossible to mention by name, can view with pride this strange sight on the river knowing it will stand firm in the performance of its duties.



It took three hours for the caisson to go down. Valves were opened and the huge steel structure sank onto a specially prepared foundation on the river's bottom.



Inventor Burgess compares a picture of his finished barge carrier with an early model of it.

INVENTOR, ANTIQUÉ CAR AFICIONADO, CONCRETE SCULPTOR *and* BACHELOR

George Burgess is an inventor.

Like many inventors his creations sometimes take on a cartoonlike, what's front what's back? look.

But they have one all-important feature. They work.

George is a technical officer in D.O.T.'s shipbuilding branch. In the six years he has been with the department he has come up with two which-end-is-up inventions of major importance.

One is a barge carrier designed especially for use at Arctic landing sites—sort of a 58-ton version of a canoe trailer for the back of your car.

The other is a waterborne collection of farm machinery to cut and dispose of weeds. It should solve the perennial problem of how to keep the Trent and Rideau waterways free of weeds, but since it has only just been completed its too soon to say it has.

George went to Frobisher Bay last October to see his carrier invention put together for its debut as a member of the Coast Guard's working force. His brain-

child—an idea he conceived, nurtured into blueprints and supervised being built at Marine Industries Limited, Sorel, Quebec, for \$36,000—was a complete success.

The king-sized carrier eases the problems of hauling Canadian Coast Guard barges out of the water at ports of call without normal docking and haul-out facilities. The huge vehicle operates in eight to ten feet of water and, hauled by a bulldozer, can lift a 35-ton load and carry it up a five degree incline.

Weighing 58 tons with a barge aboard, the carrier has six earthmover-style tires—each wheel and tire cost \$1,000. The rear group is mounted so that the wheels can move across rough and often soft ground without affecting the level of the frame. The front wheels are mounted in giant casters and the vehicle's drawbar is rigid.

The unit is backed into the water and the vessel is moved under the overhead frame. Two slings are pulled up under the craft by four 16-ton chain hoists. A bulldozer then pulls the entire assembly out of the water to the barge's winter storage place, where it is lowered to the ground. The slings are removed, the tailgate opened, and the carrier is free to move away to another lift.

The carrier is 55 feet long, 22 feet wide, and 21 feet high. Its frame is held together by high tensile bolts. Each section is sized to fit into the hold of a Coast Guard landing craft for ferrying ashore and assembling at Arctic landing sites.

George's inventive streak goes back a long way. He recalls a bug he had on perpetual motion during high school days and bombarding his science teacher with "Burgess theories and designs". However, he admits scientific luminaries like James Watt or Benjamin Franklin were not threatened.

People who indulge in such a nebulous pastime as "inventing" are frequently accused of being lazy—perhaps rightly so when one considers that one of George's personal inventions was brought about by the desire to expend a little less elbow grease.

In his more youthful days some 20 years ago, he was an enthusiastic sailor and owned a snipe class racer and other types of sailboats. It annoyed him intensely to go down to the water prepared to hop into the boat and be off for a sail only to find he must first spend half an hour baling out water.

He put his mind to work and devised an automatic baler that would perform the job even when the vessel was not in motion. The baler consisted simply of an automotive fuel pump and a pendulum device. With the gentle rocking of the boat, about a spoonful of water at a time was discharged. This was enough to keep it dry over a period of hours!

Born in Liverpool, England, in 1920, George Burgess spent the first nine years of his life at Ayr, Scotland, where his father was in the shipbuilding trade. His mother died while he and his brothers and sisters were still very young, leaving his father to care for them.

In 1929 his father accepted a position at the Saint John, N.B., Drydock and Shipbuilding Co., and the family of seven emigrated to Canada.

After high school George went to work in the engineering/drafting office of the same firm as his father. In 1942 he left to join the RCN in which, he recalls, he rose to the "dizzy heights of lieutenant".

He was demobilized in January, 1946, and joined the Department of Public Works as a marine engineer. For the next nine years George supervised the refurbishing and rebuilding of that department's fleet of dredges which deepen harbors and rivers from coast to coast.

Like all progress-minded civil servants, George kept track of the notice boards for competitions. In 1955 his eagle-eye tactics paid off when he applied for and got a technical officer's vacancy in the shipbuilding branch of D.O.T.

After the barge carrier George's next project was to dream up a mechanical solution to keep the Trent and Rideau waterway systems free from weeds.

He harkened back to 1936 when he had spent the summer operating an ensilage cutter on the Fredericton experimental farm. He remembered how it chopped the weeds in fine shreds and thought if he could incorporate this feature into a floating weed cutter it might solve the major

problem he was faced with—getting rid of the cuttings.

Cutting weeds under water has never been a great problem, but disposing of them has. Many methods have been tried: piling them up in heaps along the shore to rot (this is unsightly as well as pungent); leaving them float in the water to eventually sink and rot (this is dangerous to navigation and lock machinery, and is unsightly); or using a chemical weed killer (this is harmful to fish and other forms of marine life).

What our "mad inventor" came up with is a Jules-Verne-like contraption that looks like a floating sickle bar cutter—no, a hay loader—no, an ensilage cutter—no, not even that; all of that and more.

It was built at the Prescott Marine Agency under George's watchful eye and, says he, with the greatest of co-operation and care by Shop Foreman Jack Riley and his fellow workers.

Designed to cut weeds up to six feet below water level, the apparatus consists of two pontoons, each 30 inches wide and 38 feet long on which are mounted

- a 10-foot sickle bar cutter, adjustable from water level to six feet below the surface;
- a nine horsepower air-cooled gasoline motor to power the cutter;
- a standard hay loader to gather the weeds;
- an endless belt to transport them;
- an ensilage cutter;
- a six-cylinder gasoline engine to drive loader and ensilage cutter;
- two 40-horsepower outboard motors to propel the entire machine.

The ingenious device cuts a swath of ten feet at a speed of four miles per hour. Completed in September, it was put through a series of trials at Burritts Rapids and Beckett's Landing near Ottawa. It will be put to work clearing the navigation channels of the Rideau and Trent Canals during next summer's weed season.

Perhaps the fact George Burgess is a bachelor accounts for the free time he has to devote to unusual pursuits. He indulges in two little known hobbies—collecting early car advertisements and designing and constructing concrete structures such as bird baths, garden urns and benches. As well, he took up flying several years back, and until recently kept his private pilot's license up to date. He also skis at Ottawa's Camp Fortune, and fishes in Florida fresh-water lakes for king and mullet.

Asked if he attributed all of this to his state of single bliss, he replied, "My father wasn't a bachelor, and he has been inventing gadgets ever since I can remember."

A civil servant's budget and a passionate interest in vintage cars account for his collection of ads. But he looks forward to the day when he will own his own old snorting monster—"Until then I content myself with old ads."

He has about 400 such ads, representing approximately 85 different makes and models from 1898 to 1933.

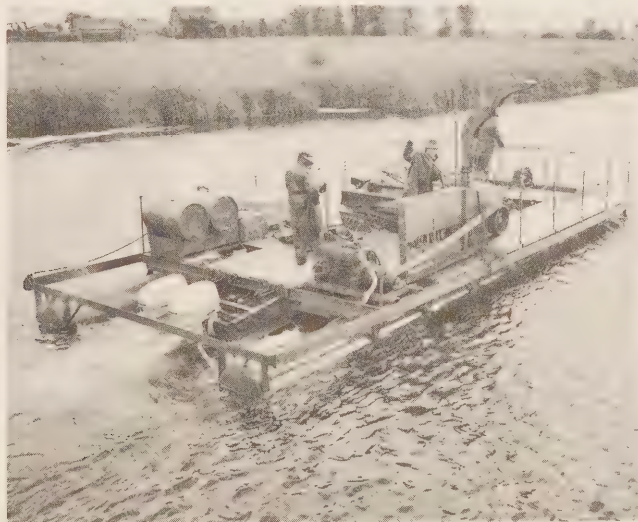
"Anything from 1933 on is representative of what I call the melted-brick-of-ice-cream school of design—terrible," he says.

We suggested that he might satisfy his desire to own a vintage model by "inventing" his own.

"Perhaps, I might just do that!"



KING-SIZED CARRIER—As seen at Frobisher Bay last October, the barge carrier is now a working member of the department.



UGLY DUCKLING—Short on glamour but rich in ingenuity, George's floating weed cutter chugs along the Rideau Canal chopping any weeds in its path.

"Dan" McLean Honored

By way of a pleasant Christmas surprise, Alexander Daniel (Dan) McLean, a retired member of the Air Transport Board and former controller of civil aviation in the department, received a special certificate in recognition of his noteworthy career in Canadian aviation. The Minister, the Honorable Leon Balcer, presented the framed document which read:

To: A. D. McLean, O.B.E.

On the occasion of your retirement from the Civil Service of Canada, I desire to express to you my appreciation of the faithful service you have rendered to your country during a period of thirty-three years in the Department of Transport and as a member of the Air Transport Board, and to extend to you my sincere thanks and best wishes.

(signed)

LEON BALCER
Minister of Transport

Mr. McLean retired from the Board in April, 1962.



Cover Designers of Distinction

Last fall art draftsmen in air services were invited to submit entries for a cover design for a soon-to-be published report on long range programs to meet air services requirements. Assistant Deputy Minister, Air, A. de Niverville, judged the entries and chose one submitted by Andre Bellemare as the winner. Runners-up were Don Munro and Tom Chaffey, whose designs will be used on other air services publications.

In the photo Mr. de Niverville (left) congratulates winner Bellemare while Mr. Munro (second from left) and Mr. Chaffey show their designs.



IN MEMORIAM

WILBERT B. SMITH

Wilbert Brockhouse Smith, superintendent of radio regulations engineering and one of the best known personalities in the broadcasting industry, died on December 27. He was 52.

Mr. Smith did much to encourage improvements in the technical side of broadcasting facilities in Canada and took a strong personal interest in the formation of the Canadian Association of Broadcast Consultants which often advises the department on frequency allocation and other technical matters.

Mr. Smith also played an important role in liaison between the department and the Canadian Radio Technical Planning Board.

He joined the department in 1939 and was active in the fulfilment of the first North American Regional Broadcasting Agreement of 1937.

He was engaged in engineering Canada's wartime monitoring service during World War II and in 1947 was in charge of estab-

lishing a network of ionospheric measurement stations, several of which were in isolated parts of the North.

He participated in the negotiation of the Canada-U.S. FM Broadcasting Agreement in 1947 and the Canada-U.S. TV Allocation Agreement in 1952 and was a delegate to the Third North American Regional Broadcasting Conference at Montreal and Washington in 1949 and 1950.

Mr. Smith was also noted for his investigations of the many reports of unidentified flying objects which made news in the early Fifties.

As well, he was one of the organizers of the police village of City View, Ont., (on the outskirts of Ottawa), and chairman of its Board of Trustees in 1955.

Born at Lethbridge, Alta., in 1910, Mr. Smith attended the University of British Columbia, graduating with a B.A.Sc. in 1933 and a M.A.Sc. in 1934. He is survived by his widow and three children.



LEIGH CAPREOL

Leigh Capreol, a well-known personality in Canadian aviation, died January 7 at his Baie d'Urfe home. He was 64. He had been manager of the Montreal International Airport (Dorval) since February, 1947.

A native of Ottawa, Mr. Capreol joined the Canadian Army in the First World War. He got his first taste of flying when he transferred to the Royal Flying Corps in 1917.

While instructing in England, he narrowly escaped death when a student froze at the controls and their plane crashed.

In 1926 he joined the RCAF with the commission of Flying Officer, resigning the following year to take a commercial pilot's licence.

During the next 20 years Mr. Capreol belonged to the legion of early aviation's legendary figures, the bush pilot and test pilot.

From 1928 to 1933 he worked as chief test pilot for the DeHavilland Aircraft Company, Toronto, for whom he flew the first Gypsy Moth introduced to Canada.

While with that company he experienced another serious crash when his aircraft threw off a wing at 5,000 feet.

He joined Austin Airways in Toronto in 1933 and participated in many daring sea-plane rescues of people stranded in the north.

During the Second World War Mr. Capreol was a consultant and test pilot to Canada's principal aircraft companies and gave the DeHavilland Mosquito fighter-bomber its first trials.

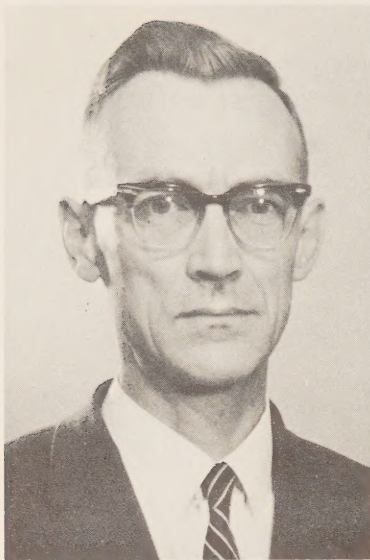
He served as manager of Cartierville Airport during the war and was also called in to test out the first Canadian-designed plane, the Norseman, when he was chief test pilot for Noorduyn Aircraft Company.

Then, until his appointment as manager of Montreal International Airport in 1947 he was employed briefly with the War Assets Corporation in Montreal.

Mr. Capreol was keenly interested in yachting and was Commodore of the Royal St. Lawrence Yacht Club during the 1955-56 season.

Survivors include his widow, the former Kathleen Senior, and a son, Philip. Another son, Geoffrey, was killed during the last war in which he served as a gunner with the RCAF.





E. A. BARKS HEADS NEW RESEARCH DIVISION

Edward A. Barks was appointed chief of a new research division in the civil aviation branch on October 1.

A native of Ottawa, Mr. Barks was officer-in-charge of the Moncton forecast office and regional meteorologist for the Atlantic Provinces from 1948 until his new appointment.

Graduating from Queen's University, Kingston, with an Honors B.A. in mathematics and economics in 1941, Mr. Barks joined the department's meteorological branch the same year. After a two-year training period he was appointed meteorologist at Gander and in the summer of 1943 was promoted to officer-in-charge of the Botwood forecast office.

From 1944 to 1948 Mr. Barks was at Goose Bay, Labrador, in charge of the forecast office serving military and civil flying operations over the North Atlantic and into the Arctic. During this period he visited weather offices in the Canadian

North, Greenland, Britain and Holland in connection with his work.

The formation of the new division, officially called operational research and development, was announced early in 1961 as a result of the continued increase of activity in all phases of civil aviation.

A small staff of specialists in analytical research, aviation, mathematics and engineering has been recruited over the past year. Some of the problems they are currently studying include the future needs of airport users, aircraft traffic separation at very high levels, bomb scares, noise abatement at airports, workloads in cockpits of modern aircraft and aircraft instrumentation to ensure safety.

In carrying out such studies, Mr. Barks and his staff will work closely with airport users, the aircraft industry, technical research organizations and other government departments and agencies.

Mr. Barks is married and has two children.

They Showed How

The old principle of "show us how to do the job better" is exactly what suggestion award winners do when they come up with ideas for a quicker or simpler way to do a job; a less-costly method; a safer procedure; or some other improvement to an existing practice.

RIZZOLLI RENE, airport maintenance foreman at Teslin, Yukon, was the recipient of a \$10 award-in-kind for recommending that four forms used for reporting maintenance be standardized to show quarts instead of pints, quarts and gallons.

Each of these forms will be revised as current supplies run out.

NORMAN STEINHAUR suggested that the use of pebbled art board for drafting projects would result in savings in time and money. A draftsman with the meteorological branch in Toronto, he received a leather briefcase for this contribution to the suggestion award plan.

Two Edmonton airport firefighters, ROBERT L. VOGEL and HILBERT ROTH, collaborated on a suggestion that a specially-designed roller be used for the four inch canvas hose carried on the Pyrene foam crash fire truck.

The roller, designed by the suggestors, was constructed from material available at the airport. It enables one man to carry out the operation.

For their joint effort Mr. Vogel and Mr. Roth each received \$10 awards-in-kind.

Three Ottawa Airport employees shared a \$100 cash award for two suggestions they submitted jointly. G. D. ASHWORTH, a technical officer, H. HALLADAY, an aircraft mechanic, and E. KRAUSE*, an assistant technician, worked on modifications to the power box and instrument panel of the Beechcraft.

The modifications involved removing, rewiring and repainting the panels of the department's 12 Beechcraft, so that cannon

plugs could be used and it would be possible to remove the panels without disturbing the wiring of the instruments.

The suggestions reduce the time taken to remove panels for rehaul and maintenance and, as well, enable easier trouble shooting for mechanical, electrical and instrument snags.

**Mr. Krause recently left Transport and is now a member of the Post Office Department.*

A suggestion made by MRS. J. E. McCOSH, a clerk with Moncton region air services, drew attention to the fact that a procedure set out in 1959 was not being followed.

Mrs. McCosh had recommended that precut stencils be used for Appendix 1 of the semi-monthly progress report. Directions to do this had previously been issued, so her idea could not be considered original. However, since it brought attention to the fact that the correct procedure was not being followed Mrs. McCosh received a companion desk set, as a token award.



The students take the wheel and guide the Agnes P along the Rideau Canal in front of the Carleton campus.

A New Life for the "Agnes P"

For the second time in 49 years the tugboat *Agnes P* had an official launching.

The first time was in 1913. The second on Wednesday, October 17, 1962, when the old steamer was handed over to the Carleton University Engineering Society.

Carleton's flag was broken out on the first—and probably last—ship in the university's fleet, the historic steam yacht *Agnes P*.

The formality climaxed a ceremony in which Dr. James A. Gibson, dean of arts and science handed over to the school of engineering a memorandum of agreement between private purchasers of the former tug and the school.

The 63 purchasers, friends of the university, put up the money to "save" the *S.S. Agnes P* from being broken up after she had been declared surplus by the Department of Transport.

They did so because she is the last steamboat operating on the Rideau Canal. Built at Buckingham, Quebec (some 30 miles from Ottawa), in 1913, she is also the last example of a locally-constructed craft of this type. On the Ottawa River not even one steam-driven vessel has survived.

The school of engineering will operate the vessel to give students experience with a single-stroke reciprocal engine, now an uncommon type.

The *Agnes P*'s vital statistics are: Length 55 feet, 5 inches; beam, 13 feet, six inches; depth, five feet, six inches; draught five feet; Scottish-built engine, 4.8 N.H.P.; boiler, 120 pounds of steam pressure.

Correspondence Courses Now Available to Marine Personnel

Personnel of the Canadian Coast Guard can now take correspondence courses to help them obtain Third or Fourth Class Certificates of Competency as Marine Engineers (steam, motor or combined).

The series of courses were developed by the marine operations and marine regulations branches to help engineering staff prepare themselves for new tickets or increase their present certification.

The courses are for three levels of competency. The first series, available now, is for the Third Class Certificate. It contains review, new mathematics and technical subjects. Considerable work has been done on courses for the Second and First Class certificates, but they will not be ready until a later date—possibly Autumn of 1963.

Candidates may start at whatever stage is appropriate to their knowledge, regardless of their education or experience. The only requirements are that applicants must have completed at least one year of satisfactory service with the department and, as evidence of their serious intentions to complete the course, they must buy their own text books.

The availability of these courses, tailored to the problems of operating our own equipment, marks a great stride forward in creating a Coast Guard service of the highest order.

Detailed information, including enrolment forms, may be obtained by writing the Chief, Training and Welfare, Department of Transport, Ottawa.



ATTENDS COURSE AT KINGSTON

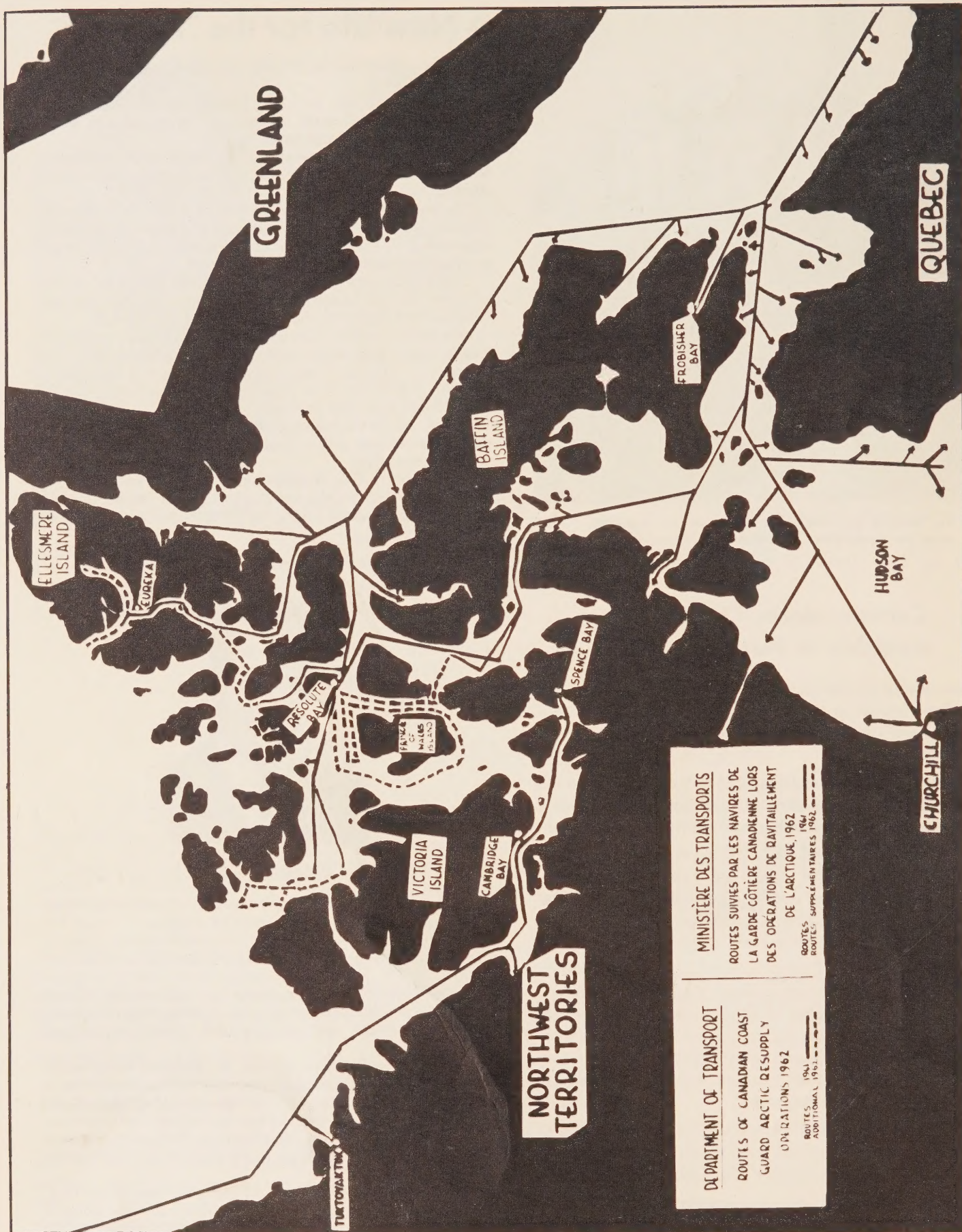
Maurice Baribeau, superintendent of regulations and licensing, civil aviation, is currently on leave of absence to attend the 1962-63 National Defence College course at Kingston, Ontario. The course began in September and will continue until the end of June.

The purpose of this annual course is to give senior military and civilian officials a background and understanding of military, economic, political and organizational aspects of national security.

A native of Lac St. Marie, Quebec, Mr. Baribeau was educated at Bourget College, Rigaud, Quebec. During the World War II he was a flying instructor with 404 squadron of the RCAF and spent some time as a prisoner of war in West and East Germany.

Mr. Baribeau joined the department in 1948 as an inspector in charge of personnel licensing and was promoted to his present position in 1950.

Mr. Baribeau is married and the father of three boys—Guy, Roland and Richard. He was chairman of the aviation group of the Professional Institute of the Public Service of Canada for 1960-61.



These are the routes used by Canadian Coast Guards vessels during 1962 Arctic Resupply Operations. The solid lines indicate routes followed by the ships in previous years. The dotted lines indicate previously uncharted waters into which these ships ventured during the past season's operations.